

TACGCCAAGC TCGAAATTAA CCCTCACTAA AGGGAACAAA AGCTGGAGCT  
 CCACCCGCGGT GCGGCCGCT CTAGAACTAG TGGATCCCC GGGCTGCAGG  
 AATTTCGAATT CTCATAACCT ATGACTAGGA CGGGAAGAGG AAGCACTGCC  
 TTTACTTCAG TGGGAATCTC GGCCTCAGCC TGCAAGCCAA GTGTTCAAG  
 TGAGAAAAGC AAGAGAATAA GCTAATACTC CTGTCTCTGAA CAAGGCAGCG  
 GCTCCTTGGT AAAGCTACTC CTTGATCGAT CCTTTGCACC GGATTGTTCA  
 AAGTGGACCC CAGGGGAGAA GTCGGAGCAA AGAACTTACC ACCAAGCAGT  
 CCAAGAGGCC CAGAAGCAAA CCTGGAGGTG AGACCCAAAG AAAGCTGGAA  
 CCATGCTGAC TTTGTACACT GTGAGGACAC AGAGTCTGTT CCTGGAAAGC  
 CCAGTGTCAA CGCAGATGAG GAACTCGGAG GTCCCCAAAT CTGCCGTGTA  
 TGTGGGGACA AGGCCACTGG CTATCACTTC AATGTCATGA CATGTGAAGG  
 ATGCAAGGSC TTTTTCAGGA GGGCCATGAA ACGCAACGCC CGGCTGAGGT  
 GCCCCTTCCG GAAGGGCGCC TGCAGATCA CCCGGAAGAC CCGGCAGACG  
 TGCCAGGCCT GCCGCCTGCG CAAGTGCCTG GAGAGCGGCA TGAAGAAGGA  
 GATGATCATG TCCGACGAGG CCGTGGAGGA GAGSCGGGCC TTGATCAAGC  
 GGAAGAAAAG TGAACGGACA GGGACTCAGC CACTGGGAGT GCAGGGGCTG  
 ACAGAGGAGC AGCGGATGAT GATCAGGGAG CTGATGGACG CTCAGATGAA  
 AACCTTTGAC ACTACCTTCT CCCATTTCAA GAATTTCCGG CTGCCAGGGG  
 TGCTTAGCAG TGGCTGCGAG TTGCCAGAGT CTCTGCAGGC CCCATCGAGG  
 GAAGAAGCTG CCAAGTGGAG CCAGGTCCGG AAAGATCTGT GCTCTTTGAA  
 GGTCTCTCTG CAGCTGCGGG GGGAGGATGG CAGTGTCTGG AACTACAAAC  
 CCCCAGCCGA CAGTGGCGGG AAAGAGATCT TCTCCCTGCT GCCCCACATG  
 GCTGACATGT CAACCTACAT GTTCAAAGGC ATCATCAGCT TTGCCAAAGT  
 CATCTCCTAC TTCAGGGACT TGCCCATCGA GGACCAGATC TCCCTGCTGA

FIGURE 1A

20084Y:20084Y

AGGGGGCCGC TTTCGAGCTG TGTCAACTGA GATTCAACAC AGTGTTC AAC  
 GCGGAGACTG GAACCTGGGA GTGTGGCCGG CTGTCCTACT GCTTGAAGA  
 CACTGCAGGT GGCTTCCAGC AACTTCTACT GGAGCCCATG CTGAAATTCC  
 ACTACATGCT GAAGAAGCTG CAGCTGCATG AGGAGGAGTA TGTGCTGATG  
 CAGGCCATCT CCTCTTCTC CCCAGACC GC CAGGTGTGC TGCAGCACC  
 CGTGGTGGAC CAGCTGCAGG AGCAATTCCG CATTACTCTG AAGTCTACA  
 TTGAATGCAA TCGGCCCCAG CCTGCTCATA GGTTCCTGTT CCGAAGATC  
 ATGGCTATGC TCACCGAGCT CCGCAGCATC AATGCTCAGC ACACCCAGCG  
 GCTGCTGCGC ATCCAGGACA TACACCCCTT TGCTACGCC CTGATGCAGG  
 AGTTGTTCCG CATCACAGGT AGCTGAGCGG CTGCCCTTGG GTGACACCTC  
 CGAGAGGCAG CCAGACCCAG AGCCCTCTGA GCCGCCACTC CCGGGCCAAG  
 ACAGATGGAC ACTGCCAAGA GCCGACAATG CCCTGCTGGC CTGTCTCCCT  
 AGGGAATTCC TGCTATGACA GCTGGCTAGC ATTCTCTCAGG AAGGACATGG  
 GTGCCCCCA CCCCCAGTTC AGTCTGTAGG GAGTGAAGCC ACAGATTCTT  
 ACGTGGAGAG TGCCTGACC TGTAGGTCAG GACCATCAGA GAGGCAAGGT  
 TGCCCTTTCC TTTTAAAAGG CCCTGTGGTC TGGGGAGAAA TCCCTCAGAT  
 CCCACTAAAG TGTCAAGGTG TGGAAGGGAC CAAGCGACCA AGGATAGGCC  
 ATCTGGGGTC TATGCCCCA TACCCACGTT TGTTCGCTTC CTGAGTCTTT  
 TCATTGCTAC CTCTAATAGT CCTGTCTCCC ACTTCCCACT CGTTCCCTC  
 CTCTCCGAG CTGCTTTGTG GGCTCCAGGC CTGTACTCAT CGGCAGGTGC  
 ATGAGTATCT GTGGGAGTCC TCTAGAGAGA TGAGAAGCCA GGAGGCCTGC  
 ACCAAATGTC AGAAGCTTG CATGACCTCA TTCCGGCCAC ATCATTCTGT  
 GTCTCTGCAT CCATTGAAC ACATTATTAA GCACCGATAA TAGGTAGCCT

FIGURE 1B

20090000-030402

GCTGTGGGGT ATACAGCATT GACTCAGATA TAGATCCTGA GCTCACAGAG  
TTTATAGTTA AAAAAACAAA CAGAAACACA AACAATTGGS ATCAAAAGGA  
GAAATGATAA GTGACAAAAG CAGCACAAAG AATTTCCCTG TGTGGATGCT  
GAGCTGTGAT GCGGGGCACT GGGTACCCAA GTGAAGGTTC CCGAGGACAT  
GAGTCTGTAG GAGCAAGGGC ACAAACTGCA GCTGTGAGTG CGTGTGTGTG  
ATTTGCTGTA GGTAGGTCTG TTTGCCACTT GATGGGGCCT GGGTTTGTTT  
CTGGGGCTGG AATGCTGGGT ATGCTCTGTG ACAAGGCTAC GCTGACAATC  
AGTTAAACAC ACCGGAGAAG AACCATTAC ATGCACCTTA TATTTCTGTG  
TACACATCTA TTCTCAAAGC TAAAGGGTAT GAAAGTGCCT GCCTTGTTTA  
TAGCCACTTG TGAGTAAAAA TTTTTTTGCA TTTTCACAAA TTATACTTTA  
TATAAGGCAT TCCACACCTA AGAACTAGTT TTGGGAAATG TAGCCCTGGG  
TTTAATGTCA AATCAAGGCA AAAGGAATTA AATAATGTAC TTTTGGCTAG  
AGGGGTAAC TTTTTTGCC TTTTCTGGG GAAATAATG TGGGGGTGTG  
GGAATTCGAA TTCGATATCA AGCTTATCGA TACCGTCGAC CTCGAGGGGG  
GGCCCGGTAC CCAATTCGCC CTATAGTGAG TCGTATTACA ATT (SEQ ID NO:1)

FIGURE 1C

66  
72  
78

FIGURE 2A

961 CCAAGTGGAGCCAGGTCCGGAAAGATCTGTGCTCTTTGAAGGTCTCTCTGCAGCTGCGGG 1020  
 K W S Q V R K D L C S L K V S L Q L R G  
 1021 GGGAGGATGGCAGTGTCTGGAAGTACAAACCCCGAGCCGACAGTGGCGGGAAAGAGATCT 1080  
 E D G S V W N Y K P P A D S G G K E I F  
 1081 TCTCCCTGCTGCCCCACATGGCTGACATGTCAACCTACATGTTCAAAGGCATCATCAGT 1140  
 S L L P H M A D M S T Y M F K G I I S F  
 1141 TTGCCAAAGTCATCTCTACTTCAGGGACTTGCCCCATCGAGGACAGATCTCCCTGCTGA 1200  
 A K V I S Y F R D L P I E D Q I S L L K  
 1201 AGGGGGCCGCTTTTCGAGCTGTGTCAACTGAGATTCAACACAGTGTTCACGCGGAGACTG 1260  
 G A A F E L C Q L R F N T V F N A E T G  
 1261 GAACCTGGGAGTGTGGCCGGCTGTCTACTGCTTGAAGACACTGCAGGTGGCTTCCAGC 1320  
 T W E C G R L S Y C L E D T A G G F Q Q  
 1321 AACTTCTACTGGAGCCCATGCTGAAATTCCACTACATGCTGAAGAAGCTGCAGCTGCATG 1380  
 L L L E P M L K F H Y M L K K L Q L H E  
 1381 AGGAGGAGTATGTGCTGATGCAGGCCATCTCCCTCTTCTCCCCAGACCGCCAGGTGTGC 1440  
 E E Y V L M Q A I S L F S P D R P G V L  
 1441 TGCAGCACC GCGTGGTGGACCAAGCTGCAGGAGCAATTGCGCATTACTCTGAAGTCCTACA 1500  
 Q H R V V D Q L Q E Q F A I T L K S Y I  
 1501 TTGAATGCAATCGGCCCCAGCCTGCTCATAGGTTCTTGTTCCTGAAGATCATGGCTATGC 1560  
 E C N R P Q P A H R F L F L K I M A M L  
 1561 TCACCGAGCTCCGAGCATCAATGCTCAGCACACCCAGCGGCTGCTGCGCATCCAGSACA 1620  
 T E L R S I N A Q H T Q R L L R I Q D I  
 1621 TACACCCCTTTGCTACGCCCCCTCATGCAGGAGTTGTTGCGCATCACAGTAGCTGAGCGG 1680  
 H P F A T P L M Q E L F G I T G S (SEQ ID NO:2)  
 1681 CTGCCCCTTGGGTGACACCTCCGAGAGGCGCCAGACCCAGAGCCCTCTGAGCGCCACTC 1740  
 1741 CCGGGCCCAAGACAGATGGCACTGCCAAGAGCGGACAAATGCCCTGCTGGCCTGTCTCCCT 1800

FIGURE 2B

1801	AGGGAAITCCTGCTATGACAGCTGGCTAGCATTCCCTCAGGAAGACATGGGTGCCCCCA	1860
1861	CCCCCAGTTCAGTCTGTAGGGAGTGAAGCCACAGATTCTTACGTGGAGAGTGCACGTGACC	1920
1921	TGTAGGTCAGGACCATCAGAGAGSCAAGGTTGCCCTTTCCCTTTTAAAGGCCCTGTGGTC	1980
1981	TGGGGAGAAATCCCTCAGATCCCACCTAAAGTGTCAAGGTGTGGAAGGGACCAAGCGACCA	2040
2041	AGGATAGGCCATCTGGGGTCTATGCCCCACATACCCACGTTTGTTCGCTTCCTGAGTCTTT	2100
2101	TCATTGCTACCTCTAATAGTCCTGCTCCCACTTCCCACTCGTTCGCCCTCCTCTTCCGAG	2160
2161	CTGCTTTGTGGGCTCCAGGCCCTGTACTCATCGGCAGGTGCATGAGTATCTGTGGGAGTCC	2220
2221	TCTAGAGAGATGAGAAGCCAGGAGGCTGCACCAAATGTGAGAAGCTTGGCATGACCTCA	2280
2281	TTCCGGCCCATCATCTCTGTGCTCTCTGCATCCATTTGAAACACATTATTAAAGCACCATAA	2340
2341	TAGGTAGCCTGCTGTGGGTATACAGCATTGACTCAGATATAGATCCTGAGCTCACAGAG	2400
2401	TTTATAGTTAAAAAACAACAGAAACACAAACAATTTGGATCAAAAGGAGAAATGATAA	2460
2461	GTGACAAAAGCAGCACAAAGGAATTTCCCTGTGTGGATGCTGAGCTGTGATGGCGGGCACT	2520
2521	GGGTACCCAAAGTGAAGGTTCCCGAGGACATGAGTCTGTAGGAGCAAGGGCACAAACTGCA	2580
2581	GCTGTGAGTGCCTGTGTGTGATTGGGTGTAGGTAGGTCTGTTTGCCACTTGATGGGSCCT	2640
2641	GGGTTTGTTCCTGGGGCTGGAATGCTGGGTATGCTCTGTGACAAGGCTACCGTGACAATC	2700
2701	AGTTAAACACACCGGAGAAGAACCATTACATGCACCTTATATTTCTGTGTACACATCTA	2760
2761	TTCTCAAAGCTAAAGGGTATGAAAAGTGCCCTTGTATAGCCACTTGTGAGTAAAAA	2820
2821	TTTTTTTGCACTTTTCAAAATTATACCTTTATATAAGGCATTCCACACCTAAGAACTAGTT	2880
2881	TTGGGAAATGTAGCCCTGGGTTTAAATGTCAAATCAAGGCAAAAGGAATTAATAATGTAC	2940
2941	TTTTGGCTAGAGGGGTAAACTTTTTTGCCCTTTTCTGGGGAAAAATATGTGGGGGTGTG	3000
3001	GGAAATTCGAATTCGATATCAAGCTTATCGATACCGTCGACCTCGAGGGGGGCCCGGTAC	3060
3061	CCAATTCGCCCTATAGTGAGTCGTATTACAATT (SEQ ID NO: 1)	3093

FIGURE 2C

FIGURE 3

1 TCCATCCTAA TACGACTCAC TATAGGGCTC GAGCGGCCGC CCGGGCAGGT  
 51 CTTTTGGCCT GCTGGGTTAG TGCTGGCAGC CCCCTGAGGC CAAGGACAGC  
 101 AGCATGACAG TCACCAGGAC TCACCACTTC AAGGAGGGGT CCCTCAGAGC  
 151 ACCTGCCATA CCCCTGCACA GTGCTGCGGC TGAGTTGGCT TCABAACATC  
 201 CAAGAGGCCC AGAAGCAAAC CTGGAGGTGA GACCCAAAGA AAGCTGGAAC  
 251 CATGCTGACT TTGTACACTG TGAGGACACA GAGTCTGTTC CTGGAAAGCC  
 301 CAGTGTCAAC GCAGATGAGG AAGTCGGAGG TCCCCAAATC TGCCGTGTAT  
 351 GTGGGGACAA GGCCACTGGC TATCACTTCA ATGTTCATGAC ATGTGAAGGA  
 401 TGCAAGGGCT TTTTCAGSAG GGCCATGAAA CGCAACGCCC GGCTGAGGTG  
 451 CCCCCTCCGG AAGGGCGCCT GCGAGATCAC CCGGAAGACC CGGCGACAGT  
 501 GCCAGGCCTG CCGCCTGCGC AAGTGCTTGG AGAGCGGCAT GAAGAAGGAG  
 551 ATGATCATGT CCGACGAGGC CGTGGAGGAG AGGCGGGCCT TGATCAAGCG  
 601 GAAGAAAAGT GAACGGACAG GGA CTGAGAGT ACTGGGAGTG CAGGGGCTGA  
 651 CAGAGGAGCA GCGGATGATG ATCAGGGAGC TGATGGACGC TCAGATGAAA  
 701 ACCTTTGACA CTACCTTCTC CCATTTCAAG AATTTCCGGC TGCCAGGGGT  
 751 GCTTAGCAGT GGCTGCGAGT TGCCAGAGTC TCTGCAGGCC CCATCGAGGG  
 801 AAGAAGCTGC CAAGTGGAGC CAGGTCCGGA AAGATCTGTG CTCTTTGAAG  
 851 GTCTCTCTGC AGCTGCGGGG GGAGGATGGC AGTGTCTGGA ACTACAAACC  
 901 CCCAGCCGAC AGTGGCGGGA AAGAGATCTT CTCCCTGCTG CCCCACATGG  
 951 CTGACATGTC AACCTACATG TTCAAAGGCA TCATCAGCTT TGCCAAAGTC  
 1001 ATCTCCTACT TCAGGGACTT GCCCATCGAG GACCAGATCT CCCTGCTGAA  
 1051 GGGGGCCGCT TTCGAGCTGT GTCAACTGAG ATTCAACACA GTGTTCAACG

FIGURE 4A



1101 CGGAGACTGG AACCTGGGAG TGTGGCCGGC TGTCTACTG CTTGGAAGAC  
 1151 ACTGCAGGTG GCTTCCAGCA ACTTCTACTG GAGCCCATGC TGA AATTCCA  
 1201 CTACATGCTG AAGAAGCTGC AGCTGCATGA GGAGGAGTAT GTGCTGATGC  
 1251 AGGCCATCTC CCTCTTCTCC CCAGACCGCC CAGGTGTGCT GCAGCACCGC  
 1301 GTGGTGGACC AGCTGCAGGA GCAATTGCGC ATTACTCTGA AGTCTTACAT  
 1351 TGAATGCAAT CGGCCCCAGC CTGCTCATAG GTTCTTGTTT CTGAAGATCA  
 1401 TGGCTATGCT CACCGAGCTC CGCAGCATCA ATGCTCAGCA CACCCAGCGG  
 1451 CTGCTGCGCA TCCAGGACAT ACACCCCTTT GCTACGCCCC TCATGCAGGA  
 1501 GTTGTTGCGC ATCACAGSTA GCTGAGCGGC TGCCCTTGGG TGACACCTCC  
 1551 GAGAGGCAGC CAGACCCAGA GCCCTCTGAG CCGCCACTCC CGGGCCAAGA  
 1601 CAGATGGACA CTGCCAAGAG CCGACAATGC CCTGCTGGCC TGTCTCCCTA  
 1651 GGG AATTCTT GCTATGACAG CTGGCTAGCA TTCCTCAGGA AGGACATGGG  
 1701 TGCCCCCAC CCCCAGTTCA GTCTGTAGGG AGTGAAGCCA CAGATTCTTA  
 1751 CGTGGAGAGT GCACTGACCT GTAGGTGAGG ACCATCAGAG AGGCAAGGTT  
 1801 GCCCTTTCTT TTAAAGGC CCTGTGTTCT GGGGAGAAAT CCCTCAGATC  
 1851 CCACTAAAGT GTCAAGGTGT GGAAGGGACC AAGCGACCAA GGATAGGCCA  
 1901 TCTGGGGTCT ATGCCACAT ACCCACGTTT GTTCGCTTCC TGAGTCTTTT  
 1951 CATTGCTACC TCTAATAGTC CTGTCTCCCA CTTCCTACTC GTTCCCTTCC  
 2001 TCTTCCGAGC TGCTTTGTGG GCTCCAGGCC TGTA CTATC GGCAGGTGCA  
 2051 TGAGTATCTG TGGGAGTCTT CTAGAGAGAT GAGAAGCCAG GAGGCCCTGCA  
 2101 CCAAATGTCA GAAGCTTGGC ATGACCTCAT TCCGGCCACA TCATTCTGTG  
 2151 TCTCTGCATC CATTGAACA CATTATTAAG CACCGATAAT AGGTAGCCTG

FIGURE 4B

2201 CTGTGGGGTA TACAGCATTG ACTCAGATAT AGATCCTGAG CTCACAGAGT  
2251 TTATAGTTAA AAAACAAAC AGAAACACAA ACAATTTGGA TCAAAAGGAG  
2301 AAATGATAAG TGACAAAAGC AGCACAAGGA ATTTCCCTGT GTGGATGCTG  
2351 AGCTGTGATG GCGGGCACTG GGTACCCAAG TGAAGGTTC CGAGGACATG  
2401 AGTCTGTAGG AGCAAGGGCA CAACTGCAG CTGTGAGTGC GTGTGTGTGA  
2451 TTTGGTGTAG GTAGGTCTGT TTGCCACTTG ATGGGGCCTG GGTTTGTTCC  
2501 TGGGGCTGGA ATGCTGGGTA TGCTCTGTGA CAAGGCTACG CTGACAATCA  
2551 GTTAAACACA CCGGAGAAGA ACCATTTACA TGCACCTTAT ATTTCTGTGT  
2601 ACACATCTAT TCTCAAAGCT AAAGGGTATG AAAGTGCCCTG CCTTGTTTAT  
2651 AGCCACTTGT GAGTAAAAAT TTTTTTGCAT TTTCACAAAT TATACTTTAT  
2701 ATAAGGCATT CCACACCTAA GAACTAGTTT TGGGAAATGT AGCCCTGGGT  
2751 TTAATGTCAA ATCAAGGCAA AAGGAATTAA ATAATGTACT TTTGGCTAGA  
2801 GGGGTAAACT TTTTGGCCT TTTTCTGGGG AAAATAATGT GGGGGTGTGG

(SEQ ID NO:17)

FIGURE 4C

TCCATCCTAATACGACTCACTATAGGGCTCGAGCGGCGCCCGGCGAGGTCTTTGGCCT 60  
GCTGGGTAGTGCTGGCAGCCCCCTGAGGCCAAGGACAGCAGCATGACACTCACCAGGAC 120  
M T V T R T  
TCACCACTTCBAGGAGGGGCTCCCTCAGAGCACTGCCATACCCCTGCACAGTGCCTGGGG 180  
H H F K E G S L R A F A I P L H S A A A  
TGAGTTGGCTTCABACCATCCAGAGGCCCAAGCAACCTGGAGGTGAGACCCCAAGA 240  
E L A S N H P R G P E A N L E V R P K E  
AAGCTGGAACCATGCTGACTTTGTACACTGTGAGGACACAGAGTCTGTTCTCTGGAAAGCC 300  
S W N H A D F V H C E D T E S V P G K P  
CAGTGTCACCGCAGATGAGGAAGTCGGAGGTCCCCAAATCTGCCGTGTATGTGGGGACAA 360  
S V N A D E E V G G P Q I C R V C G D K  
GGCCACTGGCTATCACTTCAATGTGATGACATGTGAAGGATGCAAGGGCTTTTTCAGGAG 420  
A T G Y H F N V M T C E G C K G F F R R  
GGCCATGAACGCAACGCCCGGCTGAGGTGCCCTTCCGGAAGGGCGCTGCAGAGATCAC 480  
A M K R N A R L R C P F R K G A C E I T  
CCGGAAGACCCGGCGACAGTGCAGGCCCTGCCGCTGCGCAAGTGCCTGGAGAGCGGCAT 540  
R K T R R O C O A C R L R K C L E S G M  
GAAGAAGGAGATGATCATGTCCGACGAGGCCGTGGAGGAGAGCGGGCCTTGATCAAGCG 600  
K K E M I M S D E A V E E R R A L I K R  
GAAGAAAAGTGAACGGACAGGGACTCAGCCACTGGGAGTGCAGGGGCTGCAGAGGAGCA 660  
K K S E R T G T Q P L G V Q G L T E E Q  
GCGGATGATGATCAGGGAGCTGATGGACGCTCAGATGAAAACCTTTGACACTACCTTCTC 720  
R M M I R E L M D A Q M K T F D T T F S  
CCATTTCAAGAAATTTCCGGCTGCCAGGGGTGCTTAGCAGTGGCTGCGAGTGGCCAGAGTC 780  
H F K N F R L P G V L S S G C E L P E S  
TCTGCGGCCCCCATCGAGGGAAGAAGCTGCCAAGTGGAGCCAGGTCCGGAAGATCTGTG 840  
L Q A P S R E E A A K W S Q V R K D L C  
CTCTTTGAAGGTCTCTCTGCGAGCTGCGGGGGGAGGATGGCAGTGTCTGGAATACAAAC 900  
S L K V S L Q L R G E D G S V W N Y K P  
CCCAGCCGACAGTGGCGGGGAAGAGATCTTCTCCCTGCTGCCCCACATGGCTGACATGTC 960  
P A D S G G K E I F S L L P H M A D M S  
AACCTACATGTTCAAAGGCATCATCAGCTTTGCCAAAGTCATCTCTACTTCAGGGACTT 1020  
T Y M F K G I I S F A K V I S Y F R D L

FIGURE 5A

GC	CC	CA	TC	CG	AG	GC	CA	GA	CT	CC	CT	GC	TG	AA	GG	GG	GG	CC	GC	TT	CG	AG	CT	GT	GT	CA	AC	TG	AG		1080
P	I	E	D	Q	I	S	L	L	K	G	A	A	F	E	L	C	Q	L	R												
AT	TC	AA	CA	CA	CG	AT	GT	TT	CA	AC	CG	GAG	AC	TG	GA	AC	TG	GG	CG	GC	CT	CT	CT	CA	TG	TG	TG	CT	CT	CT	1140
F	N	T	V	F	N	A	E	T	G	T	W	E	C	G	T	R	L	S	Y	C											
CT	TG	GA	AG	CA	CA	CT	GC	AG	TG	GG	CT	TG	CC	AG	CA	AC	TG	TG	GG	AG	CC	CA	TG	TG	CT	GA	AA	TT	CC	CA	1200
L	E	D	T	A	G	G	F	Q	Q	L	L	L	E	P	M	L	K	F	H												
CT	AC	TG	CT	GA	AG	AG	CT	GC	AG	TG	CA	GG	AG	GA	TG	TG	CT	GA	TG	CG	AG	CC	CA	CT	CT	C	T	C	T	C	1260
Y	M	L	K	K	L	K	L	H	E	E	Y	V	L	M	Q	A	I	S													
CC	T	CT	CT	CT	CC	CA	GC	CC	CC	AG	TG	TG	CT	GC	GC	AG	CA	CC	CG	TG	TG	GA	CC	AG	CT	GC	AG	GA			1320
L	F	S	P	D	R	P	G	V	L	Q	H	R	V	V	D	Q	L	Q	E												
GC	AA	TT	CG	CA	TT	ACT	CT	GA	AG	CT	CT	CA	TT	GA	TG	CA	AA	TC	GG	CC	CC	AG	CC	CT	GT	CT	GA	TG			1380
Q	F	A	I	T	L	K	S	Y	I	E	C	N	R	P	Q	P	A	H	R												
GT	CT	TT	GT	TT	CT	GA	AG	AT	CAT	GG	CT	AT	GT	CT	AC	CG	AG	CT	CC	GC	AG	CA	TCA	AT	GT	CT	CA	GC	A		1440
F	L	F	L	K	I	M	A	M	L	T	E	L	R	S	I	N	A	Q	H												
CA	CC	CA	GC	GG	CT	GT	CG	CA	TC	CA	GG	AC	CA	CC	CT	TT	GT	CA	CG	CC	CT	CAT	GC	AG	GA	T					1500
T	Q	R	L	L	R	I	Q	D	I	H	F	F	A	T	P	L	M	Q	E												
GT	TG	TT	CG	CA	TC	AC	AG	TAG	CT	GAG	CG	GC	TG	CC	CT	TG	GG	TG	AC	CA	CT	CC	GC	AG	GC	AG	C				1560
L	F	G	I	T	G	S	(SEQ ID NO:18)																								
CA	GA	CC	CA	GAG	CC	CT	CT	GA	GC	GC	CA	CT	CC	GG	GC	CA	AG	CA	GAT	GG	CA	CA	CT	GC	CA	AG					1620
CC	GA	CA	AT	GC	CC	TG	CT	GG	CC	TG	CT	CC	CT	AG	GG	AA	TT	CT	GT	AT	GAC	AG	CT	GG	CT	AG	CA				1680
TT	CC	TC	AG	GA	AG	GA	CA	TG	GG	TG	CCCC	CCCC	CCCC	CA	CT	AG	CT	CT	G	TG	AG	GG	AG	TG	AG	GC	CA				1740
CAG	AT	T	CT	T	CA	CT	GG	AG	TG	CA	CT	GAC	CT	G	AG	CT	T	AG	CT	CA	GA	AG	GC	CA	AG	GT					1800
G	CC	CT	TT	CT	CT	TT	AAA	AG	GC	CT	TG	GT	CT	GG	GA	AA															

FIGURE 5B

ACTCAGATATAGATCCTGAGCTCACAGAGTTTATAGTTAAAAAACAAACAGAAACACAA	2280
ACAAATTTGGATCAAAAGGAGAAATGATAAGTGACAAAAGCAGCACAAAGGAATTTCCCTGT	2340
GTGGATGCTGAGCTGTGATGGCGGGCACTGGGTACCCAAGTGAAGGTTCCCGAGGACATG	2400
AGTCTGTAGGAGCAAGGGCACAACTGCAGCTGTGAGTGCCTGTGTGTGATTGGTGTAG	2460
GTAGGTCCTGTTTGCCACTTGATGGGGCCTGGGTTTGTTCCTGGGGCTGGAATGCTGGGTA	2520
TGCTCTGTGACAAGGCTACGCTGACAAATCAGTTAAACACACCCGGAGAAGAACCATTTACA	2580
TGCACCTTATATTTCTGTGTACACATCTATTCTCAAAGCTAAAGGGTATGAAAGTGCCTG	2640
CCTTGTTTATAGCCACTTGTGAGTAAAAATTTTTTGCATTTTACAAATTATACTTTAT	2700
ATAAGGCATTCCACACCTAAGAACTAGTTTTGGGAAATGTAGCCCTGGGTTTAATGTCAA	2760
ATCAAGGCAAAAGGAATTAATAATGTACTTTTGGCTAGAGGGGTAAACTTTTTTGGCCT	2820
TTTTCTGGGGAAAAATAATGTGGGGGTGTGG (SEQ ID NO:17)	2850

FIGURE 5C

FIGURE 6